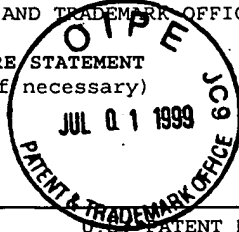


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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
MD.	P1	5,331,573	19 Jul 94	Balaji, et al.	364	500	14 Dec 90
MD.	P2	5,500,807	19 Mar 96	Lavin, et al.	364	496	21 Feb 92

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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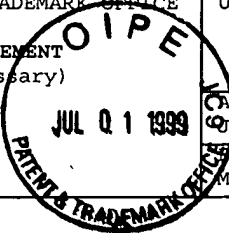
## OTHER PUBLICATIONS (including Author, Title, Date, Pertinent Pages, Etc.)

MD.	D1	ADAMS et al., "Cross-validated maximum likelihood enhances crystallographic simulated annealing refinement," Proc. Natl. Acad. Sci., Vol. 94, pp. 5018-5023, 1997
MD.	D2	APRILETTI et al., "Expression of the Rat $\alpha 1$ Thyroid Hormone Receptor Ligand Binding Domain in Escheria coli and the Use of a Ligand-induced Conformation Change as a Method for its purification to Homogeneity," Protein Expr. Purif., Vol. 6, pp.363-370, 1995
MD.	D3	BERRY et al., "Role of the two activating domains of the oestrogen receptor in the cell-type and promoter-context dependent agonistic activity of the anti-oestrogen 4-hydroxymoxifen," EMBO J., Vol. 9, No. 9, pp. 2811-2818, 1990
MD.	D4	BOURGUET et al., "Crystal Structure of the Ligand-binding domain of the Human Nuclear Receptor RXR- $\alpha$ ," Nature, Vol. 375, pp. 377-382, 1995
MD.	D5	BRZOZOWSKI et al., "Molecular Basis of agonism and Antagonism in the oestrogen receptor," Nature, Vol. 389, pp. 753-758, 1997
MD.	D6	CHANG et al., "A Thyroid Hormone Receptor Coactivator Negatively Regulated by the Retinoblastoma Protein," Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 9040-9045, 1997
MD.	D7	COHEN et al., "Molecular Modeling Software and Methods for Medicinal Chemistry," J. Med. Chem., Vol. 33, No. 3, pp. 883-894, 1990
MD.	D8	COLLINGWOOD et al., "A Natural Transactivation Mutation in the Thyroid Hormone $\beta$ Receptor: Impaired Interaction with Putative Transcriptional Mediators," Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 248-253, 1997
MD.	D9	DESJARLAIS et al., "Using Shape Complementarily as an Initial Screen in Designing Ligands for a Receptor Binding Site of Known Three-Dimensional Structure," J. Med. Chem., Vol. 31, pp. 722-729, 1988

EXAMINER\*

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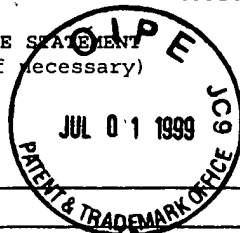
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- ND. D10 DING et al., "Nuclear Receptor-Binding Sites of Coactivators Glucocorticoid Receptor Interacting Protein 1 (GRIP1) and Steroid Receptor Coactivator 1 (SRC-1): Multiple Motifs with Different Binding Specificities," Molecular Endocrinology, Vol. 12, No. 2, pp.301-313, 1998
- ND. D11 ENG et al., "Probing the Structure and Function of the Estrogen Receptor Ligand Binding Domain by Analysis of Mutants with Altered Transactivation Characteristics," Molecular and Cellular Biology, Vol. 17, No. 8, pp. 4644-4653, 1997
- ND. D12 FARMER, "Drug Design," Ariens, E.J., ed., Vol. 10, pp. 119-143, Academic Press, NY, 1980
- ND. D13 FUREY et al., "'Phases' - A Program Package for the Processing and Analysis of Diffraction Data From Macromolecules," Am. Cryst. Assoc. Mtg. Abstr., PA 33, Vol. 18, pp. 73, 1990
- ND. D14 GLASS et al., "Nuclear Receptor Coactivators," Curr. Opin. Cell Bio., Vol. 9, pp. 222-232, 1997
- ND. D15 GREENE et al., "Monoclonal Antibodies to Human Estrogen Receptor," Proc. Natl. Acad. Sci. USA, Vol. 77, No. 9, pp. 5115-5119, 1980
- ND. D16 GREENE et al., "Purification of T47D Human Progesterone Receptor and Immunochemical Characterization with Monoclonal Antibodies," Molecular Endocrinology, Vol. 2, No. 8, pp. 714-726, 1988
- ND. D17 HEGY et al., "Carboxymethylation of the Human Estrogen Receptor Ligand-Binding Domain-Estradiol Complex: HPLC/ESMS Peptide Mapping Shows That Cysteine 447 Does Not React With Iodoacetic Acid," *Steroids*, vol. 61: 367-373 (1996)
- ND. D18 HEERY et al., "A Signature Motif in Transcriptional Co-activators Mediates Binding to Nuclear Receptors," Nature, Vol. 387, pp. 733-736, 1997
- ND. D19 HENTTU et al., "AF-2 Activity and Recruitment of Steroid Receptor Coactivator 1 to the Estrogen Receptor Depend on a Lysine Residue Conserved in Nuclear Receptors," Molecular and Cellular Biology, Vol. 17, No. 4, pp. 1832-1839, 1997
- ND. D20 HONG et al., "GRIP1, a Novel Mouse Protein That Serves as a Transcriptional Coactivator in Yeast for the Hormone Binding Domains of Steroid Receptors," Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 4948-4952, 1996
- ND. D21 HONG et al., "GRIP1, a Transcriptional Coactivator for the AF-2 Transactivation Domain of Steroid, Thyroid, Retinoid, and Vitamin D Receptors," Molecular and Cell Biology, Vol. 17, No. 5, pp. 2735-2744, 1997
- ND. D22 HORWITZ et al., "Nuclear Receptor Coactivators and Corepressors," Molecular Endocrinology, Vol. 10, pp. 1167-1177, 1996
- ND. D23 JANKNETCHT et al., "Rapid and Efficient Purification of Native Histidine-tagged Protein Expressed by Recombinant Vaccinia Virus," Proc. Natl. Acad. Sci. USA, Vol. 88, pp. 8972-8976, 1991
- ND. D24 JURUTKA et al., "Mutations in the 1,25-Dihydroxyvitamin D<sub>3</sub> Receptor Identifying C-Terminal Amino Acids Required for Transcriptional Activation That are Functionally Dissociated from Hormone Binding, Heterodimeric DNA Binding, and Interaction with Basal Transcription Factor IIB, in Vitro," J. Biol. Chem., Vol. 272, No.23, pp. 14592-14599, 1997
- ND. D25 KAKIZAWA et al., "Ligand-dependent Heterodimerization of Thyroid Hormone Receptor and Retinoid X Receptor," J. of Biol. Chem., Vol. 272, No. 38, pp. 23799-23804, 1997

EXAMINER\*

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John D. Baxter, et al.FILING DATE  
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1648 1631

- no. D26 KAMEI et al., "A CBP Integrator Complex Mediates Transcriptional Activation and AP-1 Inhibition by Nuclear Receptors," Cell, Vol. 85, pp. 403-414, 1996
- no. D27 KUIPER et al., "Comparison of the Ligand Binding Specificity and Transcript Tissue Distribution of Estrogen Receptors  $\alpha$  and  $\beta$ ," Endocrinology, Vol. 138, No. 3, pp. 863-870, 1997
- no. D28 KUNTZ, "Structure-Based Strategies for Drug Design and Discovery," Science, Vol. 257, pp. 1078-1082, 1992
- no. D29 KUSSIE et al., "Structure of the MDM2 Oncoprotein Bound to the p53 Tumor Suppressor Transactivation Domain," Science, Vol. 274, pp. 948-953, 1996
- no. D30 LANDEL et al., "Estrogen Receptor Accessory Proteins Augment Receptor-DNA Interaction and DNA Bending," J. Steroid Biochem. Molec. Bio., Vol. 63, pp. 59-73, 1997
- no. D31 LANDEL et al., "The Interaction of Human Estrogen Receptor with DNA Is Modulated by Receptor-Associated Proteins," Molecular Endocrinology, Vol. 8, pp. 1407-1419, 1994
- no. D32 LANZENNEC et al., "Mechanistic Aspects of Estrogen Receptor Activation Probed with Constitutively Active Estrogen Receptors: Correlations with DNA and Coregulator Interactions and Receptor Conformational Changes," Molecular Endocrinology, Vol. 11, pp. 1375-1386, 1997
- no. D33 LE DOUARIN et al., "A Possible Involvement TIF1 $\alpha$  and TIF1 $\beta$  in the Epigenetic Control of Transcription by Nuclear Receptors," EMBO J., Vol. 15, No. 23, pp. 6701-6715, 1996
- no. D34 LEE et al., "Thyroid Hormone Receptor Dimerization Function Maps to a Conserved Subregion of the Ligand Binding Domain," Mol. Endocrinol., Vol. 6, pp. 1867-1873, 1992
- no. D35 LIN et al., "A Conformation Switch in Nuclear Hormone Receptors Is Involved in Coupling Hormone Binding to Corepressor Release," Mol. Cell. Biol., Vol. 17, No. 10, pp. 6131-6138, 1997
- no. D36 MASUYAMA et al., "Evidence for Ligand-Dependent Intramolecular Folding of the AF-2 Domain in Vitamin D Receptor-Activated Transcription and Coactivator Interaction," Mol. Endocrinol., Vol. 11, pp. 1507-1517, 1997
- no. D37 MENG et al., "Automated Docking with Grid-Based Energy Evaluation," J. Computational Chem., Vol. 13, No. 4, pp. 505-524, 1992
- no. D38 MUELLER et al., "Complex Heterocyclic Structures - A Challenge for Computer-Assisted Molecular Modeling," Bull. Soc. Chim. Belg., Vol. 97, pp. 655-667, 1988
- no. D39 MURSHUDOV et al., "Refinement of Macromolecular Structures by the Maximum-Likelihood Method," Acta Cryst., Vol. D53, pp. 240-255, 1997
- no. D40 NAVIA et al., "Use of Structural Information in Drug Design," Curr. Opin. Struct. Biol., Vol. 2, pp. 202-210, 1992
- no. D41 NORMAN et al., "The Rat Growth Hormone Gene Contains Multiple Thyroid Response Elements," J. Biol. Chem., Vol. 264, No. 20, pp. 12063-12073, 1989
- no. D42 NORRIS et al., "Enhancement of Estrogen Receptor Transcriptional Activity by the Coactivator GRIP-1 Highlights the Role of Activation Function 2 in Determining Estrogen Receptor Pharmacology," J. Biol. Chem., Vol. 273, No. 12, pp. 6679-6688, 1998

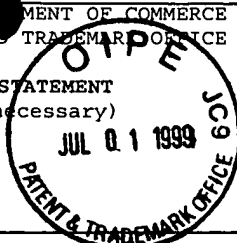
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INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANT: John D. Baxter, et al.	
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ND.	D43	O'DONNELL et al., "Thyroid Hormone Receptor Mutations that Interfere with Transcriptional Activation also Interfere with Receptor Interaction with a Nuclear Protein," Molecular Endocrinology, Vol. 5, pp. 94-99, 1991
ND.	D44	ONATE et al., "Sequence and Characterization of a Coactivator for the Steroid Hormone Receptor Superfamily," Science, Vol. 270, pp. 1354-1357, 1995
ND.	D45	RADHAKRISHNAN et al., "Solution Structure of the KIX Domain of CBP Bound to the Transactivation Domain of CREB: A Model for Activator: Coactivator Interactions," Cell, Vol. 91, pp. 741-752, 1997
ND.	D46	RENAUD et al., "Crystal Structure of the RAR-γ Ligand-Binding Domain Bound to All-trans Retinoic Acid," Nature, Vol. 378, pp. 681-689, 1995
ND.	D47	SAATCIOGLU et al., "Mutations in the Conserved C-Terminal Sequence in Thyroid Hormone Receptor Dissociate Hormone-Dependent Activation from Interference with AP1-Activity," Mol. Cell Biol., Vol. 17, No. 8, pp. 4687-4695, 1997
ND.	D48	SADOVSKY et al., "Transcriptional Activators Differ in Their Responses to Overexpression of TATA-Box-Binding Protein," Molecular and Cellular Biology, Vol. 15, pp. 1554-1563, 1995
ND.	D49	SEIELSTAD et al., "Analysis of the Structural Core of the Human Estrogen Receptor Ligand Binding Domain by Selective Proteolysis/Mass Spectrometric Analysis," Biochemistry, Vol. 34, pp. 12605-12615, 1995
ND.	D50	SEIELSTAD et al., "Molecular Characterization by Mass Spectrometry of the Human Estrogen Receptor Ligand-Binding Domain Expressed in Escherichia coli," Molecular Endocrinology, Vol. 9, pp. 647-658, 1995
ND.	D51	SHIAU et al., "Activation of the Human Estrogen Receptor by Estrogenic and Antiestrogenic Compounds in Saccharomyces cerevisiae: A Positive Selection System," Gene, Vol. 179, pp. 205-210, 1996
ND.	D52	SHIBATA et al., "Role of Co-activators and Co-repressors in the Mechanism of Steroid/Thyroid Receptor Action," Recent Prog. Horm. Res., Vol. 52, pp. 141-164, 1997
ND.	D53	SPENCER et al., "Steroid Receptor Coactivator-1 is a Histone Acetyltransferase," Nature, Vol. 389, pp. 194-198, 1997
ND.	D54	TAGAMI et al., "Nuclear Receptor Corepressors Activate Rather than Suppress Basal Transcription of Genes That Are Negatively Regulated by Thyroid Hormone," Molecular and Cellular Biology, Vol. 17, No. 5, pp. 2642-2648, 1997
ND.	D55	TANENBAUM et al., "Crystallographic Comparison of the Estrogen and Progesterone Receptor's Ligand Binding Domains," Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 5998-6003, 1998
ND.	D56	TORA et al., "The Cloned Human Oestrogen Receptor Contains a Mutation which Alters Its Hormone Binding Properties," EMBO J., Vol. 8, No. 7, pp. 1981-1986, 1989
ND.	D57	TORCHIA et al., "The Transcriptional Co-activator p/CIP Binds CBP and Mediates Nuclear-Receptor Function," Nature, Vol. 387, pp. 677-684, 1997
ND.	D58	UESUGI et al., "Induced α-Helix in the VP 16 Activation Domain upon Binding to a Human TAF," Science, Vol. 277, pp. 1310-1313, 1996
ND.	D59	VERLINDE et al., "Structure-Based Drug Design: Progress, Results and Challenges," Structure, Vol. 2, pp. 577-587, 1994

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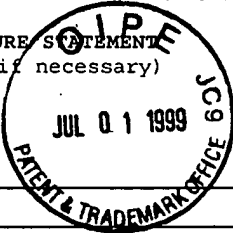
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MD <sup>2</sup>	D60	WAGNER et al., "A Structural Role for Hormone in the Thyroid Hormone Receptor," Nature, Vol. 378, pp. 690-697, 1995
MD <sup>2</sup>	D61	WEBB et al., "Tamoxifen Activation of the Estrogen Receptor/AP-1 Pathway: Potential Origin for the Cell-Specific Estrogen-Like Effects of Antiestrogens," Mol. Endocrinol., Vol. 9, pp. 443-456, 1995
MD.	D62	WHITE et al., "Ligand-Independent Activation of the Oestrogen Receptor by Mutation of a Conserved Tyrosine," EMBO J., Vol. 16, No. 6, pp. 1427-1235, 1997
MD.	D63	WHITFIELD et al., "A Highly Conserved Region in the Hormone-Binding Domain of the Human Vitamin D Receptor Contains Residues Vital for Heterodimerization with Retinoid X Receptor and for Transcriptional Activation," Molecular Endocrinology, Vol. 9, pp. 1166-1179, 1995
MD.	D64	WURTZ et al., "A Canonical Structure for the Ligand-Binding Domain of Nuclear Receptors," Nat. Struct. Biol., Vol. 3, No. 1, pp. 87-94, 1996
MD.	D65	ZHU et al., "The Different Hormone-dependent Transcriptional Activation of Thyroid Hormone Receptor Isoforms Is Mediated by Interplay of Their Domains," J. Biol. Chem., Vol. 272, No. 14, pp. 9048-9054, 1997

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